Request to Archive

With The National Centers for Environmental Information For ADT-HURSAT (Advanced Dvorak Technique-Hurricane Satellite Data) Provided by National Climatic Data Center

2014-02-11

This information will be used by NCEI to conduct an appraisal and make a decision on the request.

1. Who is the primary point of contact for this request?

James Kossin

NCDC

james.kossin@noaa.gov

2. Name the organization or group responsible for creating the dataset.

DOC/NOAA/NESDIS/NCDC > National Climatic Data Center, NESDIS, NOAA, U.S. Department of Commerce

3. Provide an overview summarizing the scope of data you want to archive. Describe the outputs, data variables, including their measurement resolution and coverage.

Every three hours over the lifetime of every tropical cyclone recorded over the globe, the ADT-HURSAT provides the position of the storm center as a latitude/longitude pair and an estimate of the windspeed. A few other single point values are also available at each 3-hourly time point, such as raw Dvorak T-number and satellite scene type (eye, sheared, central dense overcast, etc).

4. What is the time period covered by the dataset? (YYYY-MM-DD, YYYY-MM or YYYY)

From 1982-01-01

Ongoing as continuous updates to the data record

5. Edition or version number(s) of the dataset:

version 1

6. Describe the level to which the data are processed. For example, are these unprocessed raw observations, derived parameters, quality controlled or inter-calibrated data, etc.?

The data are derived via application of the Advanced Dvorak Technique (ADT) to the Hurricane Satellite (HURSAT) dataset. The ADT is a well-know algorithm that is used operationally by most forecast offices. The HURSAT is an NCDC data product (primary point of contact: Ken Knapp, RSAD)

7. Approximate date when the dataset was or will be released to the public:

2014

8. Who are the expected users of the archived data? How will the archived data be used?

Anyone looking at historical tropical cyclone tracks, who is interested in considering a homogenized intensity record.

9. Has the dataset undergone user evaluation and/or an independent review process? Did NCEI participate in design reviews?

The dataset is introduced and described in the peer-reviewed literature:

Kossin, J. P., T. L. Olander, and K. R. Knapp, 2013: Trend analysis with a new global record of tropical cyclone intensity. J. Climate, 26, 9960-9976.

10. Describe the dataset's relationship to other archived datasets, such as earlier versions or related source data. If this is a new version, how does it improve upon the previous version(s)?

The data are derived using the Hurricane Satellite (HURSAT) dataset, which is an NCDC data product (primary point of contact: Ken Knapp, RSAD)

11. List the input datasets and ancillary information used to produce the data.

HURSAT is the only input dataset.

12. List web pages and other links that provide information on the data.

Descriptive metadata that conform to a standard. We will work with you to be sure that the data conform.

- 13. List the kinds of documents, metadata and code that are available for archiving. For example, data format specifications, user guides, algorithm documentation, metadata compliant with a standard such as ISO 19115, source code, platform/instrument metadata, data/process flow diagrams, etc.
- 1. We will produce a user's guide that describes the data format (simple columnar ascii file). Additional information is found in the citation above.
- 14. Indicate the data file format(s).
- 1. netCDF-3
- 15. Are the data files compressed?

gzip

16. Provide details on how the files are named and how they are organized (e.g., file_name_pattern_YYYYMM.tar in monthly aggregations).

A single netcdf file with an appropriate name.

- 17. Explain how to access sample data files and/or a file listing for previewing. If it is not available now, when will it be available?
- 18. What is the total data volume to be submitted?

Historic Data: all historic data or data submitted as a completed collection.

Total Data Volume: 50MB

Number of Data Files: 1

19. Are later updates, revisions or replacement files anticipated? If so, explain the conditions for submitting these additional data to the archive.

Ideally, the data will be updated once per year, as tracking data become available. The tracking data are needed to update the HURSAT.

20. Describe the server that will connect to the ingest server at NCEI for submitting the data.

Physical Location: Asheville, NC System Name: Ken Knapp System Owner: Ken Knapp (he is his own man)

Additional Information: For this small datafile, the easiest way forward is probably to have

Ken walk the data over.

- 21. What are the possible methods for submitting the data to NCEI? Select all that apply.
- 1. FTP PUSH
- 22. Identify how you would like NCEI to distribute the data. Web access support depends on the resources available for the dataset.
- 1. Direct download links
- 23. Will there be any distribution, usage, or other restrictions that apply to the data in the archive?

No known constraints apply to the data.

24. Discuss the rationale for archiving the dataset and the anticipated benefits. Mention any risks associated with not archiving the dataset at NCEI.

This is a global 30+ year record of tropical intensity that will be of interest to anyone looking at long term variability and trends in tropical cyclones.

25. Are the data archived at another facility or are there plans to do so? Please explain.

No

26. Is there an existing agreement or requirement driving this request to archive? Have you already contacted someone at NCEI?

No

27. Do you have a data management plan for your data?

No

28. Have funds been allocated to archive the data at NCEI?

No

29. Identify the affiliated research project, its sponsor, and any project/grant ID as applicable.

N/A

30. Is there a desired deadline for NCEI to archive and provide access to the data?

Archive by: 2014-09-01

Accessible by:

31. Add any other pertinent information for this request.

None